

DEC 29 2004

PTO/SB/21 (09-04)

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<b>TRANSMITTAL FORM</b>  (to be used for all correspondence after initial filing)	Application Number	10712,942	
	Filing Date	November 13, 2003	
	First Named Inventor	Thomas J. Kennedy, III	
	Art Unit	3711	
	Examiner Name	R. Gordon	
Total Number of Pages in This Submission	14	Attorney Docket Number	P-4628-3-C1-3-D1

ENCLOSURES (Check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation <input type="checkbox"/> Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input checked="" type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input type="checkbox"/> Other Enclosure(s) (please identify below):
Remarks		
SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT		
Firm Name	The Top-Flite Golf Company	
Signature	<i>Michelle Bugbee</i>	
Printed name	Michelle Bugbee	
Date	December 29, 2004	Reg. No. 42,370

CERTIFICATE OF TRANSMISSION/MAILING			
I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:			
Signature	<i>Michelle Bugbee</i>		
Typed or printed name	Michelle Bugbee	Date	December 29, 2004

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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PTO/SB/17 (12-04v2)

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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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Effective on 12/08/2004.

Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

**FEE TRANSMITTAL**  
**For FY 2005**☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$)

500.00

**Complete if Known**

Application Number	10/712,942
Filing Date	November 13, 2003
First Named Inventor	Thomas J. Kennedy, III
Examiner Name	R. Gorden
Art Unit	3711
Attorney Docket No.	P-4628-3-C1-3-D1

**METHOD OF PAYMENT (check all that apply)**☐ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify):☒ Deposit Account Deposit Account Number: 17-0150 Deposit Account Name: Top-Flite Golf Company

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☒ Charge fee(s) indicated below☐ Charge fee(s) indicated below, except for the filing fee☒ Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17☒ Credit any overpayments

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

**FEE CALCULATION****1. BASIC FILING, SEARCH, AND EXAMINATION FEES**

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

**2. EXCESS CLAIM FEES****Fee Description**

Each claim over 20 (including Reissues)

Fee (\$)	Small Entity Fee (\$)
50	25

Each independent claim over 3 (including Reissues)

200	100
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Multiple dependent claims

360	180
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Total Claims	Extra Claims	Fee (\$)	Fee Paid (\$)
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- 20 or HP =  $\text{Total Claims} - 20$  x  $\text{Fee ($)}$  =  $\text{Fee Paid ($)}$ 

HP = highest number of total claims paid for, if greater than 20.

Indep. Claims	Extra Claims	Fee (\$)	Fee Paid (\$)
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- 3 or HP =  $\text{Indep. Claims} - 3$  x  $\text{Fee ($)}$  =  $\text{Fee Paid ($)}$ 

HP = highest number of independent claims paid for, if greater than 3.

**3. APPLICATION SIZE FEE**

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee (\$)	Fee Paid (\$)
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- 100 =  $\text{Total Sheets} - 100$  / 50 =  $\text{Number of each additional 50 or fraction thereof}$  x  $\text{Fee ($)}$  =  $\text{Fee Paid ($)}$  (round up to a whole number)**4. OTHER FEE(S)**

Non-English Specification, \$130 fee (no small entity discount)

Fees Paid (\$)

Other (e.g., late filing surcharge): Brief in support of Appeal

500.00

**SUBMITTED BY**

Signature	<i>Michelle Bugbee</i>	Registration No. (Attorney/Agent)	42,370	Telephone	413-322-2937
Name (Print/Type)	Michelle Bugbee			Date	December 29, 2004

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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DEC 29 2004

**P-4628-3-C1-3-D1 PATENT**  
**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re patent application of Thomas J. Kennedy, III et al.

Serial No.: 10/712,942

Examiner: R. Gorden

Filing Date: November 13, 2003

Group Art Unit: 3711

For: MULTI-LAYER GOLF BALL

Mail Stop AF  
Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

Sir:

**APPEAL BRIEF UNDER 37 C.F.R. § 41.37**

This Appeal Brief is in furtherance of the Notice of Appeal that was filed for the above-referenced application on November 29, 2004.

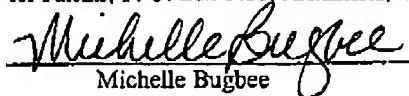
The fees required under § 1.17, and any required petition for extension of time for filing this brief and fees therefor, are dealt with in the accompanying Fee Transmittal.

Appellant files herewith an Appeal Brief in connection with the above-identified application, wherein claims 10 to 28 were finally rejected in the Office Action of September 27, 2004. What follows is Appellant's Appeal Brief in accordance with 37 C.F.R. § 41.37.

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**CERTIFICATION UNDER 37 C.F.R. 1.8**

I hereby certify that this Appeal Brief and the documents referred to as attached therein are being transmitted by facsimile on this date December 29, 2004, to TC3700 at 703-872-9306 addressed to: Mail Stop AF, Attention: Board of Patent Appeals and Interferences, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450.

  
Michelle Bugbee

10/712,942

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**I. REAL PARTY IN INTEREST (37 C.F.R. § 41.37(c)(1)(i))**

The real parties in interest in this appeal are the inventors named in the caption of this brief (Thomas J. Kennedy, III et al.) and the assignee, Callaway Golf Company.

**II. RELATED APPEALS AND INTERFERENCES (37 C.F.R. § 41.37(c)(1)(ii))**

Currently, U.S. Application Serial No. 10/074,665 is on appeal before the U.S. Patent and Trademark Office. The present application and Serial No. 10/074,665 base their priority on the same parent application, U.S. Application Serial No. 09/993,422.

**III. STATUS OF CLAIMS (37 C.F.R. § 41.37(c)(1)(viii))**

The status of claims set forth after the Final Office Action mailed September 27, 2004 was, and is, as follows:

Allowed claims: none

Rejected claims: 10 to 28

Canceled claims: 1 to 9

The present appeal is directed to claims 10 to 28.

**IV. STATUS OF AMENDMENTS (37 C.F.R. § 41.37(c)(1)(iv))**

In the Final Office Action of September 27, 2004, claims 10 to 12, 14 to 18, 21, 22, 25 and 26 were rejected under 35 U.S.C. § 102(b) as anticipated by, or in the alternative, under 35 U.S.C. § 103(a) as obvious over Nesbitt (4,431,193), claims 13, 19, 20, 23, 24, 27 and 28 were rejected under 35 U.S.C. 103(a) as being unpatentable over Nesbitt (4,431,193) in view of Isaac (US 3,989,568), and claims 10 to 28 were rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 to 42 of U.S. Patent No. 6,213,894.

There are no unentered amendments.

**V. SUMMARY OF CLAIMED SUBJECT MATTER (37 C.F.R. § 41.37(c)(1)(v))**

The present invention is directed to a golf ball comprising a core; an inner cover layer disposed on the core, the inner cover layer having a Shore D hardness

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of at least 60 as measured on the curved outer surface thereof, and including at least one material selected from the group consisting of polyphenylene ether/ionomer blends, ionomers, polyamides, polyurethanes, polyester elastomers, polyester amides, metallocene catalyzed polyolefins, and blends thereof; and an outer cover layer disposed about the inner cover layer, the outer cover layer having a Shore D hardness of no more than 55 as measured on the curved surface thereof; wherein the golf ball having a spin factor of at least about 5, a PGA compression of 100 or less, and a coefficient of restitution of at least 0.770 (claim 1).

The present invention is also directed to a golf ball comprising: an inner ball, the inner ball comprising a core and an inner cover layer disposed about the core, the inner ball having a coefficient of restitution of at least 0.780; and an outer cover layer disposed about the inner ball, the outer cover layer having a Shore D hardness of no more than 55 as measured on the curved surface thereof; wherein the golf ball exhibits a coefficient of restitution of at least 0.770 and a PGA compression of 100 or less (claim 15).

The present invention is also directed to a golf ball comprising a core; an inner cover layer disposed about the core, the inner cover layer having a Shore D hardness of at least 60 as measured on the curved surface thereof and comprising at least one material selected from the group consisting of polyphenylene ether/ionomer blends, ionomers, polyamides, polyurethanes, polyester elastomers, polyester amides, metallocene catalyzed polyolefins, and blends thereof; and an outer cover layer disposed about the inner cover layer, the outer cover layer having a Shore D hardness of no more than 55 as measured on the curved surface thereof and comprising a material selected from the group consisting of polyphenylene ether/ionomer blends, ionomers, polyamides, polyurethanes, polyester elastomers, polyester amides, metallocene catalyzed polyolefins, and blends thereof; wherein the golf ball exhibits a PGA compression of 100 or less and a coefficient of restitution of at least 0.770 (claim 22).

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**VI. GROUND OF REJECTION TO BE REVIEWED ON APPEAL (37 C.F.R. § 41.37(c)(1)(vi))**

Whether claims 10 to 12, 14 to 18, 21, 22, 25 and 26 are anticipated under 35 U.S.C. § 102(b), or in the alternative, are unpatenable under 35 U.S.C. § 103(a) over Nesbitt (4,431,193); and whether claims 13, 19, 20, 23, 24, 27 and 28 are unpatentable under 35 U.S.C. 103(a) over Nesbitt (4,431,193) in view of Isaac (3,989,568).

The obviousness-type double patenting rejection of claims 10 to 28 will not be addressed in this Appeal Brief because Applicants will file a Terminal Disclaimer once the other issues have been overcome, as stated in the Response to Final Office Action filed November 2, 2004.

**VII. ARGUMENTS (37 C.F.R. § 41.37(c)(1)(vii))**

1. The Examiner's rejection of claims 10 to 12, 14 to 18, 21, 22, 25 and 26 as anticipated under 35 U.S.C. § 102(b), or in the alternative, as unpatentable under 35 U.S.C. § 103(a) over Nesbitt (4,431,193) is erroneous and must be reversed.

The Examiner has rejected claims 10 to 12, 14 to 18, 21, 22, 25 and 26 as being anticipated under 35 U.S.C. § 102(b), or in the alternative, as unpatentable under 35 U.S.C. § 103(a) over Nesbitt (4,431,193). The basis for the Examiner's rejection is as follows:

Claims 10-12, 14-18, 21-22, 25, and 26 are rejected under 35 U.S.C. 102(b) as anticipated by, or in the alternative, under 35 U.S.C. 103(a) as obvious over Nesbitt (4,431,193). Nesbitt discloses a golf ball comprising a core, an inner cover layer, and an outer cover layer. The coefficient of restitution of the core is 0.770 and the coefficient of restitution of the core and inner cover layer is 0.800 or more. Applicant's COR, 0.770 or more, for the ball is an inherent feature of Nesbitt. Nesbitt further discloses the inner cover layer is made from a hard, high flex modulus resin such as Surlyn 1605 (ionomer), which has a Shore D hardness of 62 (see Yabuki 6,359,066 col 11). The outer cover layer is made from a soft, low flexural modulus resin such as Surlyn 1855 (ionomer), which has a Shore D hardness of 55 (see Yabuki 6,359,066 col 11). The spin

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factor, COR, and PGA compression are considered obvious over Nesbitt since the materials are the same.

(See Office Action of September 27, 2004 p. 2.)

**A. The Examiner's Cited Reference**

US 4,431,193 to Nesbitt discloses a golf ball comprising a core and a multi-layer cover, and the inner cover layer comprises a hard, high flexural modulus ionomer, and the outer cover layer comprises a soft, low flexural modulus ionomer. Nesbitt uses as examples of suitable materials for use in the cover layers Surlyn® 1605 and 1855 ionomers, high and low flexural modulus ionomers respectively, but Nesbitt does not disclose or claim the specific Shore D of the cover layers, nor does Nesbitt limit the cover layers to materials having a specific Shore D.

**B. The Subject Matter of Claims 10 to 12, 14 to 18, 21, 22, 25 and 26 is Patentably Distinguishable Over the Cited Art**

Claims 10 to 12, 14 to 18, 21, 22, 25 and 26 are not anticipated by, or alternatively, unpatentable over Nesbitt.

Appellant respectfully disagrees with the Examiner. Nesbitt discloses a golf ball comprising a core and a multi-layer cover, and the inner cover layer comprises a hard, high flexural modulus ionomer, and the outer cover layer comprises a soft, low flexural modulus ionomer. Nesbitt uses as examples of suitable materials for use in the cover layers Surlyn® 1605 and 1855 ionomers, high and low flexural modulus ionomers respectively, but Nesbitt does not disclose or claim the specific Shore D of the cover layers, nor does Nesbitt limit the cover layers to materials having a specific Shore D. Additionally, Nesbitt does not disclose or claim a PGA compression of 100 or less, a spin factor, or the COR.

Appellant respectfully submits that the burden is on the Examiner to provide a basis in fact and/or technical reason to reasonably support the determination that the allegedly inherent characteristics necessarily flow from the teachings of the prior art. Inherency must be a necessary result and

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not merely a possible result. Appellants respectfully submit that the Examiner has failed to support the inherency determination with any facts or technical reasoning. Appellant's specification includes example golf balls made using the materials disclosed in Nesbitt, and these balls do not meet the COR limitations. See, for example, Examples 3 and 4 and Tables 16, 17 and 18, where golf balls representing the golf ball of Nesbitt are produced, and the COR is considerably lower than that of the inventive golf balls. Specifically, the COR of finished ball 5 in Table 17 (the ball made with Nesbitt's materials) is 0.757, which does not meet the limitation of at least 0.770 as claimed by Appellant. Therefore, Appellant respectfully submits that contrary to the assertions of the Examiner, the spin factor, COR and PGA compression are not obvious and/or inherent.

Claims 11, 12, 14, 16 to 18, 21, 25 and 26 depend, or ultimately depend, from claims 10, 15 and 22, which Appellant submits are not anticipated by, or alternatively, obvious over Nesbitt for the reasons just discussed, therefore, claims 11, 12, 14, 16 to 18, 21, 25 and 26 are also not anticipated by, or alternatively, obvious over Nesbitt.

The Examiner's cited reference neither teaches nor suggests the golf ball of claims 10 to 12, 14 to 18, 21, 22, 25 and 26.

**2. The Examiner's rejection of claims 13, 19, 20, 23, 24, 27 and 28 as unpatentable under 35 U.S.C. § 103(a) over Nesbitt (4,431,193) in view of Isaac (3,989,568) is erroneous and must be reversed.**

The Examiner has rejected claims 13, 19, 20, 23, 24, 27 and 28 as being unpatentable under 35 U.S.C. § 103(a) over Nesbitt (4,431,193) in view of Isaac (3,989,568). The basis for the Examiner's rejection is as follows:

Claims 13, 19, 20, 23, 24, 27, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nesbitt (4,431,193) in view of Isaac (3,989,568). Nesbitt discloses the invention as shown above but fails to disclose a polyurethane outer cover. Isaac teaches a polyurethane cover. One skilled in the art would substitute the polyurethane cover of Isaac in the golf ball of Nesbitt to obtain a golf ball with good click and feel (Isaac col. 1, lines 15-30).



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(See Office Action of September 27, 2004 p. 3.)

**A. The Examiner's Cited References**

US 4,431,193 to Nesbitt discloses a golf ball comprising a core and a multi-layer cover, and the inner cover layer comprises a hard, high flexural modulus ionomer, and the outer cover layer comprises a soft, low flexural modulus ionomer. Nesbitt uses as examples of suitable materials for use in the cover layers Surlyn<sup>®</sup> 1605 and 1855 ionomers, high and low flexural modulus ionomers respectively, but Nesbitt does not disclose or claim the specific Shore D of the cover layers, nor does Nesbitt limit the cover layers to materials having a specific Shore D.

U.S. Patent No. 3,989,568 to Isaac only discloses golf balls having a single cover layer formed from polyurethane prepolymers having at least two different reaction rates so that half shells can be formed in one reaction, and the cover may be cured about the core in a second reaction.

**B. The Subject Matter of Claims 13, 19, 20, 23, 24, 27 and 28 is Patentably Distinguishable Over the Cited Art**

Claims 13, 19, 20, 23, 24, 27 and 28 are not obvious over Nesbitt in view of Isaac.

Appellant respectfully disagrees with the Examiner and submits that the Examiner has not made out a *prima facie* case of obviousness. As discussed above, Nesbitt does not disclose Appellant's invention. Additionally, Isaac discloses golf balls having a single cover layer formed from polyurethane prepolymers having at least two different reaction rates so that half shells can be formed in one reaction, and the cover may be cured about the core in a second reaction. Isaac does not disclose a multi-layer cover, or more particularly, a multi-layer cover having a polyurethane outer cover layer, or an outer cover layer comprising reaction-injection-molded polyurethane.

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Appellant respectfully submits that Appellant's golf ball is not disclosed even if Nesbitt and Isaac are combined as suggested by the Examiner because neither Nesbitt nor Isaac, alone or in combination, discloses Appellant's COR ranges, therefore, neither Nesbitt nor Isaac disclose Appellant's claimed invention.

Claims 13, 19, 20, 23, 24, 27 and 28 depend, or ultimately depend, from claims 1, 15 and 22, which Appellant submits are not obvious over Nesbitt in view of Isaac for the reasons discussed above, therefore, claims 13, 19, 20, 23, 24, 27 and 28 are also not obvious over Nesbitt in view of Isaac.

The Examiner's cited references neither teach nor suggest the golf ball of claims 13, 19, 20, 23, 24, 27 and 28.

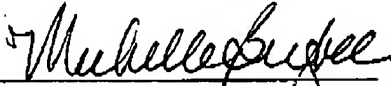
In view of the above, Appellant respectfully submits that claims 10 to 28 are not anticipated by, or alternatively, obvious over the cited references. Accordingly, it is respectfully requested that the Examiner's rejection of claims 10 to 28 be reversed.

Respectfully submitted,

THOMAS J. KENNEDY, III ET AL.

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Date: December 29, 2004

By:   
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**VIII. CLAIMS APPENDIX (37 C.F.R. § 41.37(c)(1)(viii))**

The claims standing on appeal are:

10. A golf ball comprising:

a core;

an inner cover layer disposed on the core, the inner cover layer having a Shore D hardness of at least 60 as measured on the curved outer surface thereof, and including at least one material selected from the group consisting of polyphenylene ether/ionomer blends, ionomers, polyamides, polyurethanes, polyester elastomers, polyester amides, metallocene catalyzed polyolefins, and blends thereof; and

an outer cover layer disposed about the inner cover layer, the outer cover layer having a Shore D hardness of no more than 55 as measured on the curved surface thereof;

wherein the golf ball having a spin factor of at least about 5, a PGA compression of 100 or less, and a coefficient of restitution of at least 0.770.

11. The golf ball according to claim 10, wherein the outer cover layer comprises at least one material selected from the group consisting of polyphenylene ether/ionomer blends, ionomers, polyamides, polyurethanes, polyester elastomers, polyester amides, metallocene catalyzed polyolefins, and blends thereof.

12. The golf ball according to claim 10, wherein the outer cover layer comprises ionomer.

13. The golf ball according to claim 10, wherein the outer cover layer comprises polyurethane.

14. The golf ball according to claim 10, wherein the golf ball exhibits a spin factor of at least 8.

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15. A golf ball comprising:

an inner ball, the inner ball comprising a core and an inner cover layer disposed about the core, the inner ball having a coefficient of restitution of at least 0.780; and

an outer cover layer disposed about the inner ball, the outer cover layer having a Shore D hardness of no more than 55 as measured on the curved surface thereof;

wherein the golf ball exhibits a coefficient of restitution of at least 0.770 and a PGA compression of 100 or less.

16. The golf ball according to claim 15, wherein the inner cover layer of the inner ball comprises at least one material selected from the group consisting of polyphenylene ether/ionomer blends, ionomers, polyamides, polyurethanes, polyester elastomers, polyester amides, metallocene catalyzed polyolefins, and blends thereof.

17. The golf ball according to claim 15, wherein the inner cover layer of the inner ball exhibits a Shore D hardness of at least 60.

18. The golf ball according to claim 15, wherein the outer cover layer comprises at least one material selected from the group consisting of polyphenylene ether/ionomer blends, ionomers, polyamides, polyurethanes, polyester elastomers, polyester amides, metallocene catalyzed polyolefins, and blends thereof.

19. The golf ball according to claim 18, wherein the outer cover layer comprises at least one of a thermoset polyurethane, a thermoplastic polyurethane, and combinations thereof.

20. The golf ball according to claim 19, wherein the outer cover layer comprises a reaction injection molded polyurethane.

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21. The golf ball according to claim 18, wherein the outer cover layer has a Shore D hardness of from about 30 to about 55.

22. A golf ball comprising:

a core;

an inner cover layer disposed about the core, the inner cover layer having a Shore D hardness of at least 60 as measured on the curved surface thereof and comprising at least one material selected from the group consisting of polyphenylene ether/ionomer blends, ionomers, polyamides, polyurethanes, polyester elastomers, polyester amides, metallocene catalyzed polyolefins, and blends thereof; and

an outer cover layer disposed about the inner cover layer, the outer cover layer having a Shore D hardness of no more than 55 as measured on the curved surface thereof and comprising a material selected from the group consisting of polyphenylene ether/ionomer blends, ionomers, polyamides, polyurethanes, polyester elastomers, polyester amides, metallocene catalyzed polyolefins, and blends thereof;

wherein the golf ball exhibits a PGA compression of 100 or less and a coefficient of restitution of at least 0.770.

23. The golf ball according to claim 22, wherein polyurethanes include thermoset and thermoplastic polyurethanes.

24. The golf ball according to claim 23, wherein the polyurethane is a reaction injection molded polyurethane.

25. The golf ball according to claim 22, wherein the outer cover layer has a Shore D hardness of from about 30 to about 55.

26. The golf ball according to claim 22, wherein the golf ball has a spin factor of at least 5.0.

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27. The golf ball according to claim 13, wherein polyurethanes include thermoset and thermoplastic polyurethanes.

28. The golf ball according to claim 27, wherein the polyurethane is a reaction injection molded polyurethane.